

(PCR). Cultures for bacteria and fungi were negative. We isolated *Mycobacterium fortuitum* from the discharge and skin biopsy using PCR (Fig. 1c) and subsequent sequencing of the amplified product (Fig. 1c) [1]. The patient was started on linezolid 600 mg twice daily and ofloxacin 400 mg p.o. daily. The lesion healed completely after 2 months of therapy, with no recurrence after 6 months of follow-up (Fig. 1d). Growth scans at regular intervals during pregnancy confirmed a well-grown fetus with estimated fetal weight and abdominal circumference on the 95th centile. The patient went into spontaneous labour at 39+ weeks, and delivered vaginally a healthy normal baby boy weighing 3.2 kg.

Historically, mycobacterial infections in pregnancy and puerperium are almost exclusively due to *Mycobacterium tuberculosis*. Pregnancy is a complex immunological state wherein there is a shift from a T helper 1 to a T helper 2 response, leading to impaired cell-mediated immunity. Non-tuberculous mycobacteria (NTM) are ubiquitous organisms with low virulence; as such, they often manifest during immunosuppression or following a breach in the skin. Clinical manifestations are varied and diagnosis is often delayed. NTM can be categorized into rapidly growing mycobacteria (RGM) and slowly growing mycobacteria. The most prevalent RGM species are *M. abscessus*, *M. fortuitum* and *M. chelonae*. A literature search revealed only two previous reports of rapidly growing NTM pathogens during pregnancy, namely *M. fortuitum* [2] and *M. chelonae* [3]. In a review of 63 patients with skin or soft tissue infections due to RGM, it was observed that patients with *M. chelonae* and *M. abscessus* infections were older, had disseminated lesions and were immunosuppressed. In contrast, patients with *M. fortuitum* infection were more likely to have a single lesion following surgery or injury, as seen in our case.

Optimal treatment of RGM infections remains poorly established. *M. fortuitum* and *M. chelonae* isolates are usually susceptible to amikacin, ciprofloxacin, moxifloxacin and trimethoprim-sulfamethoxazole, while *M. abscessus* isolates are susceptible to amikacin, clarithromycin, azithromycin and linezolid [4,5]. Clarithromycin appears to be reliably active against *M. chelonae* and *M. abscessus*, although its activity against *M. fortuitum* is less predictable [4,5]. Combination therapy with more than one drug seems prudent because of concerns about acquired resistance. To conclude, although rare in pregnancy, NTM should be suspected and treated effectively based on the susceptibility pattern in order to prevent the risk of dissemination.

References

- [1] Sharma KAS, Kumar S, Sharma A, Sharma M. Post-operative *Mycobacterium fortuitum* infection following laproscopic inguinal hernia repair: a case report. *J Gastroenterol Infs* 2012;2:62–4.
- [2] Katayama I, Nishioka K, Nishiyama Ss. *Mycobacterium fortuitum* infection presenting as widespread cutaneous abscess in a pregnant woman. *Int J Dermatol* 1990;29:383–4.
- [3] Katz VL, Farmer R, York J, Wilson JD. *Mycobacterium chelonae* sepsis associated with long-term use of an intravenous catheter for treatment of hyperemesis gravidarum. A case report. *J Reprod Med* 2000;45:581–4.
- [4] Gayathri R, Therese KL, Deepa P, Mangai S, Madhavan HN. Antibiotic susceptibility pattern of rapidly growing mycobacteria. *J Postgrad Med* 2010;56:76–8.
- [5] Tang SS, Lye DC, Jureen R, Sng LH, Hsu LY. Rapidly growing mycobacteria in Singapore, 2006–2011. *Clin Microbiol Infect* 2015;21:236–41.

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Single-incision sling for stress urinary incontinence: A video tutorial



Dear Editor,

We wanted to share an educational video about single-incision slings (SISs). SISs have been recently introduced as alternative to standard tapes to increase safety. In fact, SISs involve a shorter length of tapes and very limited intracorporeal dissection without the blind passage of the needles through retropubic space or obturator foramen. Moreover, SISs have demonstrated a negligible learning curve [1]. In addition, SISs seem to have good effectiveness irrespective of age, BMI and obstetrical history [2,3]. Lastly, proper bilateral anchoring on obturator membranes seems to be unnecessary in order to maintain efficacy [4]. Basing on these characteristics, SIS devices can be very attractive for inexperienced surgeons. However severe complications have been described, including exposure, hematomas, and bladder perforation [5]. According to a survey distributed to students, residents, and surgeons – video hosting usage is the preferred method to prepare for surgery [6]. Recently, Larouche et al. identified a list of surgical steps considered mandatory for a complete midurethral slings video-tutorial to evaluate measure the accuracy and comprehensiveness of educational videos available on the internet. Interestingly, none of the considered videos resulted complete [7]. Here we propose a video aimed to provide a comprehensive educational video with all surgical steps necessary to achieve a successful SIS placement. From the pre-determined list of 16 expected standard midurethral sling surgical steps we retained those applicable to single-incision sling [7]. These steps were: (1) anesthesia, (2) patient positioning, (3) Foley catheter insertion, (4) vaginal mucosa infiltration with anesthetic agent, (5) vaginal mucosa incision, (6) lateral dissection with Metzenbaum scissors, (7) sling placement, (8) cystourethroscopy, (9) sling tensioning, (10) vaginal mucosa closure, (11) Foley catheter removal, (12) voiding trial, (13) and same-day discharge. Informed consent provided information on indications, alternatives, risks (voiding dysfunction/urinary retention, overactive bladder, bladder/urethral injury, pelvic/groin pain, mesh complication, reoperation for failure, urinary tract infection, vascular injury, bowel injury), and expected outcomes.

The following steps were performed:

- 1 The patient was placed in the lithotomy position
- 2 Foley catheter was inserted in order to empty the bladder
- 3 Local anesthesia was performed: vaginal mucosa was infiltrated with an anesthetic agent and hydrodissection of para-urethral tunnels was performed
- 4 A 1.5 cm midurethral vaginal mucosa incision was performed
- 5 Bilateral paraurethral tunnels were prepared with Metzenbaum scissors and dissection carried out toward obturator membranes
- 6 The sling was mounted on kit needles which were directed toward obturator membranes
- 7 Sling tension was adjusted by placing Mayo scissors between the sling and the urethra
- 8 A running colporrhaphy was used to obtain vaginal mucosa closure
- 9 Foley catheter was removed
- 10 A cystourethroscopy was performed to exclude unintended bladder/urethra perforation
- 11 Voiding trial involved an attempt to void the bladder after retrograde or spontaneous filling.
- 12 Same-day discharge with post-operative instructions.

The featured video showed all surgical steps necessary to achieve a successful SISs placement. According to literature, SISs represent a valid alternative to standard retropubic and transobturator tapes, with similar effectiveness. Their characteristics may theoretically lead to lower complication. However severe complications have been described, including exposure, hematomas, and bladder perforation [5]. Unluckily, up-to-date the availability of educational surgical video dealing with all surgical steps and debated issues is scarce [7]. A comprehensive educational video may be a valid instrument to train physicians, and this is confirmed by the growing interest of gynecology and urology societies in video hosting and publication. Physicians should be offered high-quality medical information for continuing education. This step-by-step video-tutorial may represent an important tool to improve surgical know-how about single-incision sling.

Financial disclaimers/conflict of interest

None.

Consent

Written informed consent was obtained from the patient for publication of this video article and any accompanying images.

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Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:<https://doi.org/10.1016/j.ejogrb.2019.04.037>.

References

- [1] Spelzini F, Frigerio M, Regini C, Palmieri S, Manodoro S, Milani R. Learning curve for the single-incision suburethral sling procedure for female stress urinary incontinence. *Int J Gynaecol Obstet* 2017;139(December (3)):363–7.
- [2] Palmieri S, Frigerio M, Spelzini F, Manodoro S, Milani R. Risk factors for stress urinary incontinence recurrence after single-incision sling. *Neurol Urodyn* 2018;(January):17.
- [3] Frigerio M, Regini C, Manodoro S, Spelzini F, Milani R. Mini-sling efficacy in obese versus non-obese patients for treatment of stress urinary incontinence. *Minerva Ginecol* 2017;69(December (6)):533–7.
- [4] Spelzini F, Cesana MC, Verri D, Polizzi S, Frigerio M, Milani R. Three-dimensional ultrasound assessment and middle term efficacy of a single-incision sling. *Int Urogynecol J* 2013;24(August (8)):1391–7.
- [5] Milani R, Manodoro S, Cola A, Palmieri S, Frigerio M. Management of unrecognized bladder perforation following suburethral tape procedure. *Int J Gynaecol Obstet* 2018;142(July (1)):118–9.
- [6] Rapp AK, Healy MG, Charlton ME, Keith JN, Rosenbaum ME, Kapadia MR. YouTube is the most frequently used educational video source for surgical preparation. *J Surg Educ* 2016;73(November–December (6)):1072–6.
- [7] Larouche M, Geoffrion R, Lazare D, Clancy A, Lee T, Koenig NA, et al. Mid-urethral slings on YouTube: quality information on the internet? *Int Urogynecol J* 2016;27(June (6)):903–8.

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Acute abdomen in pregnancy due to synchronous appendicitis and twisted Morgagni hydatid: A case report



Dear Editor,

We found that acute abdomen in pregnancy can be a rare manifestation of synchronous appendicitis and twisted Morgagni hydatid. Although appendicitis is the most common cause of acute abdomen in pregnancy, isolated tubal torsion is an extremely rare occurrence. In this case, to the best of our knowledge, we report the second patient with simultaneous appendicitis and torsion of the fallopian tube.

A 30-year-old G1 P0 healthy female at 30 weeks' gestation presented to the emergency unit with generalized abdominal pain. She reported a 1-day history of generalized abdominal pain without nausea or vomiting, which on admission had localized to her right lower quadrant. Vitals were unremarkable and she was afebrile. Physical assessment revealed local tenderness without guarding or rebound. Pelvic examination could not be performed. Laboratory tests showed mild leukocytosis. Ultrasound examination detected a well-grown fetus with normal biophysical profile. There were no signs of placental abruption or morbid adherent placenta and cervical length was 30 mm.

However, transvaginal scan demonstrated a unilocular, anechoic, avascular cystic lesion without papillations or wall irregularities and a maximal diameter of 40 mm in the right adnexal region. The ovaries appeared normal in terms of size, structure and vascularity.